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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,378	03/26/2004	Kazuhito Kishi	250938US2	7634

22850 7590 01/13/2005

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EXAMINER	
LEE, PETER	

ART UNIT	PAPER NUMBER
2852	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/809,378	KISHI ET AL.	
	Examiner	Art Unit	
	Peter Lee	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 26 March 2004 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/10/2004.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The drawings and specification are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

The reference characters 16 and 17 found in Figure 1 are not found in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. Claims 1-3, and 7 are rejected under 35 U.S.C. 103(c) as being unpatentable over Fujita et al (US pn 6542705) in view of Inuyama et al. (JP 63210979).

Fujita teaches an image-forming apparatus, comprising: a fixing device (fig. 12; note: Col. 10 lines 1-21) (ie. fixing unit), the fixing device including: a heat roller (fig. 12 part 1) (ie. heating part) including heating elements (fig. 12 part 3 and 4) (ie. heating element); an electric

double layer capacitor as a large capacity storage (fig. 19 part 17b) (ie. power storage unit) configured to supply power to the second heating element (fig. 19 part 4) so that the heating element of the heater generates heat, the power storage unit includes a capacitor (fig. 19 part 17b: col. 13 lines 29-45) (ie. chargeable and dischargeable capacitor); and a CPU (fig. 19 part 13) (ie. controller/control means) configured to control an operation of the storage unit (fig. 15 part 17 col. 11 lines 36-44) the controller performs control such that the capacitor is charged in accordance with a remaining amount of stored energy thereof (note: col. 13 lines 52-61).

Fujita also teaches that after the warm up/stand by state is up (ie. after the stopped image forming operation) the surface temperature of the heat roller is determined to be at the pre-selected temperature by the CPU (col. 10 lines 53-60) (ie. controller performs the control such that the capacitor is charged until a voltage of the capacitor is higher than or equal to a predetermined voltage) and the capacitor storage (fig. 15 part 17) is switched off of the second heating element by the CPU to allow for normal fixing operations at the fixing temperature acquired (col. 11 lines 25-35) (ie. allows returning to the image forming operation).

Fujita does not teach the practice of continuing to charge the capacitor even in a state when image forming operations is suspended due to abnormalities.

It is Inuyama who teaches the practice of charging a capacitor during the case when the door to a fixing heater is open (ie abnormal condition).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controlling unit taught by Fujita to continue the charging operation of the capacitor during the event of an abnormality as taught by Inuyama. One of ordinary skill would have been motivated to do so because storing of a charge on a capacitor in the event of a

fault such as a fixing heater door open will allow the user to keep monitor of the fixing device (abstract translation; constitution: 1st sentence).

1. Claims 1-3, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Inuyama et al (JP 63210979).

Fujita teaches An image-forming apparatus, comprising: a fixing device (fig. 12; note: page 6 paragraph [0089]) (ie. fixing unit), the fixing device including: a heat roller (fig. 12 part 1) (ie. heating part) including heating elements (fig. 12 part 3 and 4) (ie. heating element); an electric double layer capacitor as a large capacity storage (fig. 19 part 17b) (ie. power storage unit) configured to supply power to the second heating element (fig. 19 part 4) so that the heating element of the heater generates heat, the power storage unit includes a capacitor (fig. 19 part 17b: note: page 7 paragraph [0112]) (ie. chargeable and dischargeable capacitor); and a CPU (fig. 19 part 13) (ie. controller/control means) configured to control an operation of the storage unit (fig. 15 part 17 note: page 6 paragraph [0095]), the controller performs control such that the capacitor is charged in accordance with a remaining amount of stored energy thereof (note: page 8 paragraph [0113]).

Fujita also teaches that after the warm up/stand by state is up (ie. after the stopped image forming operation) the surface temperature of the heat roller is determined to be at the pre-selected temperature by the CPU (page 6 paragraph [0098]) (ie. controller performs the control such that the capacitor is charged until a voltage of the capacitor is higher than or equal to a predetermined voltage) and the capacitor storage (fig. 15 part 17) is switched off of the second

heating element by the CPU to allow for normal fixing operations at the fixing temperature acquired (page 6 paragraph [0098]) (ie. allows returning to the image forming operation).

Fujita does not teach the practice of continuing to charge the capacitor even in a state when image forming operations is suspended due to abnormalities.

It is Inuyama who teaches the practice of charging a capacitor during the case when the door to a fixing heater is open (ie abnormal condition).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the controlling unit taught by Fujita to continue the charging operation of the capacitor during the event of an abnormality as taught by Inuyama. One of ordinary skill would have been motivated to do so because storing of a charge on a capacitor in the event of a fault such as a fixing heater door open will allow the user to keep monitor of the fixing device (abstract translation; constitution: 1st sentence).

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al. (US 2002/0043523).

Fujita teaches An image-forming apparatus, comprising: a fixing device (fig. 12; note: page 6 paragraph [0089]) (ie. fixing unit), the fixing device including: a heat roller (fig. 12 part 1) (ie. heating part) including heating elements(fig. 12 part 3 and 4) (ie. heating element); an electric double layer capacitor as a large capacity storage (fig. 19 part 17b) (ie. power storage unit) configured to supply power to the second heating element (fig. 19 part 4) so that the heating

element of the heater generates heat, the power storage unit includes a capacitor (fig. 19 part 17b: note: page 6 paragrpah [0112]) (ie. chargeable and dischargeable capacitor); and a CPU (fig. 19 part 13) (ie. controller/control means) configured to control an operation of the storage unit (fig. 15 part 17 note: page 6 paragraph [0095]), wherein, during a warm up or stand by state of the fixing device (page 6 paragraph [0096] and [0098]) (ie. when image-forming operation of the image-forming apparatus is stopped), the CPU performs control such that the capacitor is charged in accordance with a remaining amount of stored energy thereof (note: page 6 paragraph [0096] and [0113]).

Fujita also teaches that after the warm up/stand by state is up (ie. after the stopped image forming operation) the surface temperature of the heat roller is determined to be at the pre-selected temperature by the CPU (page 6 paragraph [0098]) (ie. controller performs the control such that the capacitor is charged until a voltage of the capacitor is higher than or equal to a predetermined voltage) and the capacitor storage (fig. 15 part 17) is switched off of the second heating element by the CPU to allow for normal fixing operations at the fixing temperature acquired (page 6 paragraph [0098]) (ie. allows returning to the image forming operation).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Lee whose telephone number is 571-272-2846. The examiner can normally be reached on mon-fri 9:00 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PL 1/6/2005

Arthur T. Grimley
Supervisory Patent Examiner
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